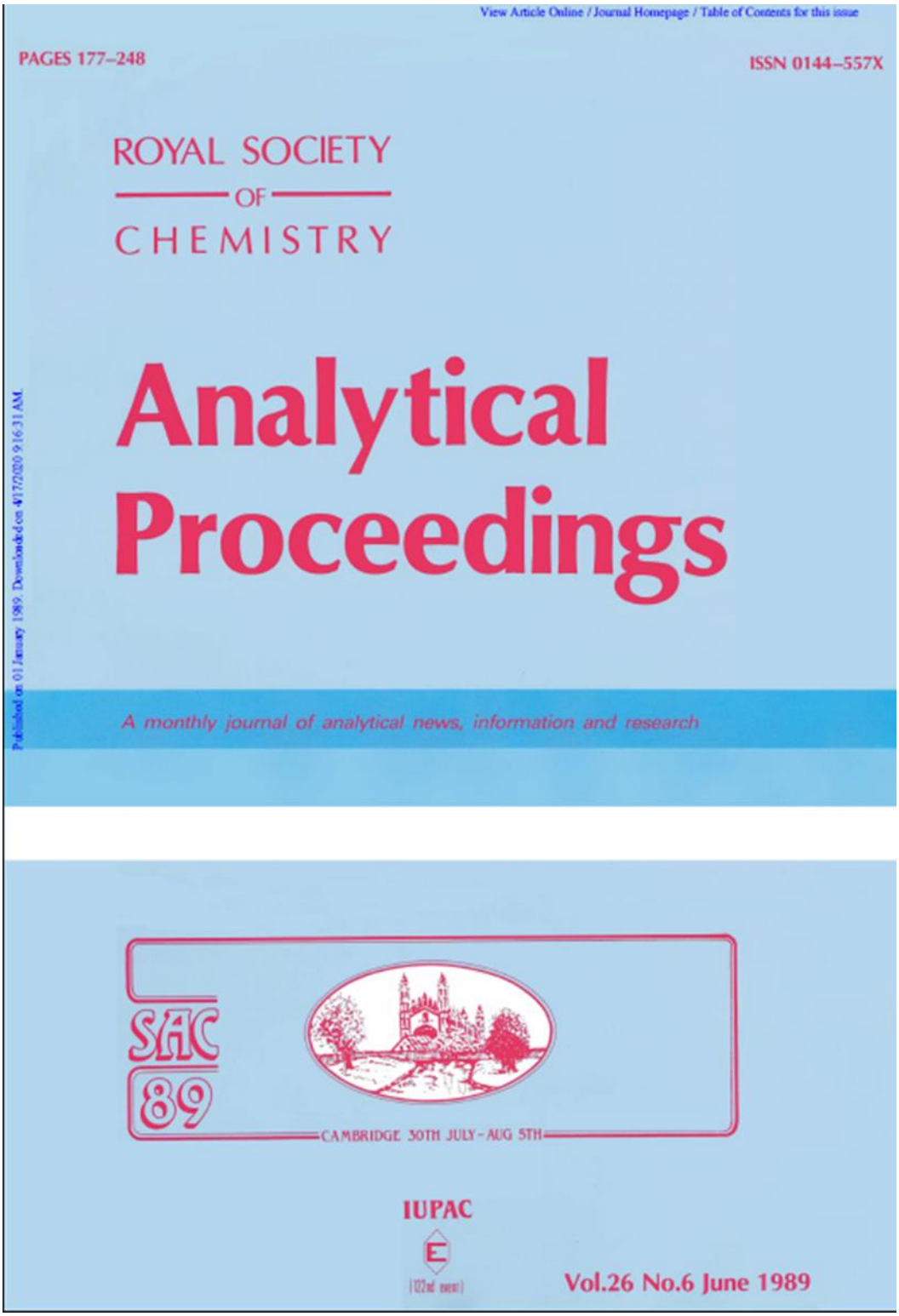

Lady Mitchell Hall (A)

Chromatography

Chairman: P. J. Houghton

A9 10.30–10.55 *Invited lecture*. V. Schurig, University of Tubingen: "Separation of isotopic and enantiomeric compositions by complexation gas chromatography."

A10 11.00–11.25 "Gas chromatographic separation of hydrocarbons on chitin and chitosan as stationary phases," Jama Tuddin Mohd Daud and Harry Agusnar (Universiti Kebangsaan, Malaysia).

A11 11.30–11.55 "Pyrolysis gas chromatography of separated zones on thin layer chromatograms," S. J. Lyle (King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia).

A12 12.00–12.25 "Gas chromatographic determination of dibutyltin and dioctyltin dichlorides as hydride derivatives," Sinikka Vainiotalo and Leila Hayri (Institute of Occupational Health, Helsinki, Finland).

A13 15.00–15.25 "Selectivity and column comparisons in

B12 12.00–12.25 "Evaluation of a new sodium selective electrode," Martin Telting, Malcolm R. Smyth and Dermot Diamond (NIHE, Dublin), Eileen Seward, Gyula Svehla and Anthony M. McKervey (University College, Cork).

B13 15.00–15.25 "Development of an optical fibre aluminium sensor in a flowing system," E. Blanco Gonzalez, R. Pereiro Garcia, M. E. Diaz Garcia, A. Sanz-Medel (University of Oviedo, Spain), and R. Narayanaswamy (UMIST, Manchester).

B14 15.30–15.55 "Sensors based on polymer modified electrodes," Malcolm R. Smyth, Donal Leech, Mary Meaney and Johannes G. Vos (NIHE, Dublin), Pilar Dominguez, Jose-Maria Fernandez Alvarez and Tuno Blanco (University of Oviedo, Spain).

B15 16.00–16.25 "The preparation of polypyrrole layers for NO_x gas sensors," Jonathan M. Slater and Esther Watt (Birkbeck College, London).

B16 16.30–16.55 "Development of a test rig for evaluating metal oxide gas sensors in solvent analysis,"

SENSORS BASED ON POLYMER MODIFIED ELECTRODES

Malcolm R. Smyth, Donal Leech, Mary Meaney, Johannes G. Vos

School of Chemical Sciences, NIHE Dublin, Glasnevin, Dublin 9, Ireland

Pilar Domínguez, José María Fernández Álvarez, Paulino Tuñón Blanco

Department of Analytical Chemistry, University of Oviedo, Oviedo, Spain

The application of polymer modified electrodes as sensors for a range of inorganic and organic species is of increasing interest in analytical chemistry. In recent years, our studies have concentrated on the development of polymer modified electrodes based on $[Ru(bpy)_2(PVP)_5Cl]Cl$ as detection systems in flow injection analysis[1,2] and on the incorporation of antibody species, such as anti-human serum albumin, into polypyrrole[3]. This paper will review the recent results that we have obtained using novel ruthenium-containing polymers, and on the further studies on the incorporation of proteins into polymeric matrices.

References

1. Barisci JN, Wallace GG, Wilke E, Meaney M, Smyth MR and Vos JG, Electroanalysis, in the press.
2. Meaney M, Smyth MR, Vos JG and Wallace GG, Electroanalysis, submitted for publication.
3. John R, Wallace GG and Smyth MR, Biosensors, submitted for publication.